

62.37

Greenhouses Located on Stansbury Rd.,  
East of Merritt Ave. and Sollers Point Rd.,  
Dundalk, Md., near Baltimore

**JOSEPH S. MERRITT** SR.  
JR.  
*The Maryland Flower Garden*  
**HYDRANGEA SPECIALISTS**

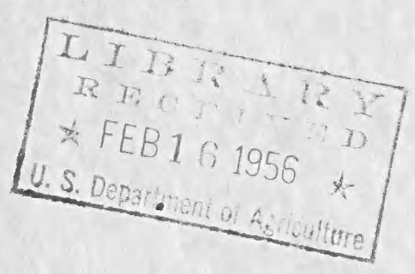
MAIL ADDRESS: P O. BOX F, DUNDALK (BALTIMORE) 22, MD.

Phones: Business, AT water 5-1919  
Res., J.S.M.Jr. AT water 4-4391  
Res., J.S.M.Sr. ID lewood 5-7456  
Res., D.S.P AT water 5-1919

Ship To:

Your Order: ORDER  
Date Accepted:  
To Ship On or About  
Requested Ship Via:

Invoice To:



All Prices Per 100 Plants, In Units of 25 Per Variety F. O. B. Dundalk (Baltimore), Md. Pot Sizes → Number of Shoots →	SPRING DELIVERY For Growing On		FALL DELIVERY—DORMANT For Forcing For Easter and Mother's Day					AMOUNTS
	Rooted Cuttings	3" 1 Shoot	3" 1 Shoot	4" 2 or More	5" 3 or More	6" 4 or More	7" 7 or More	
1956 INTRODUCTIONS per 100	30.00	50.00	50.00	80.00	100.00	150.00	250.00	
Monte Forte Perle (M) <i>Carmin</i> Red								
Sainte Therese (M) <i>Best White</i>								
Sanctis (E) <i>Medium Red</i>								
Zurich (E) <i>Light Red</i>								
NOVELTIES per 100	20.00	40.00	40.00	70.00	85.00	125.00	200.00	
Charm (E) <i>Carmin</i> Red								
*Dundalk (L) <i>Medium Red</i>								
Red Star (M) <i>Brilliant</i>								
*Rose Supreme (M) <i>Rose Pink</i>								
STANDARD VARIETIES per 100	16.00	30.00	30.00	60.00	70.00	100.00	150.00	
Engel's White (M) <i>Strong Grower</i>								
*Europa (E) <i>Salmon Pink</i>								
Hamburg (E) <i>Carmin</i>								
"jean merritt" (M) <i>Dark Pink</i>								
*Kuhnert (M) <i>Rose Pink</i>								
*Merveille (L) <i>Light Red</i>								
Regula (E) <i>White</i>								
*Rosabelle (L) <i>Rose Pink</i>								
Strafford (M) <i>Dark Pink</i>								
TOTALS ORDERED →								

NOTE: "Our Selection"—Billed According to Varieties Shipped.

"OUR SELECTION" →

\* These Varieties Blue Easily—See "Color" on Reverse Side.  
(E)—Early (M)—Mid-Season (L)—Late

Remarks:

Transportation Charges Advanced from Dundalk  
To:  
TOTAL AMOUNT DUE \$

*Merritt's Hydrangeas Bloom*

# Merritt's Hydrangeas Bloom

## Hydrangea Culture

**OUR SPECIALTY**—We started in the greenhouse business in 1913, and have been hydrangea specialists since 1920. We do not force hydrangeas into flower, but concentrate all of our efforts to produce better hydrangeas for you to bloom. We ship rooted cuttings and small plants in the Spring for growing on, and dormant hydrangeas in the Fall for Easter and Mother's Day forcing. We force some of each variety every year for a culture check, and they can be seen at our greenhouses during the early Spring months.

**VARIETY SELECTION**—You should grow the varieties that do the best for you in your locality. However, we recommend that you also try new varieties in addition to the old stand-bys in order to discover varieties that will be even better for you. If in doubt, let us make a selection for you, telling us the size and blooming season wanted: early, mid-season, or late. In this manner you will be assured of receiving the best flowering plants available, according to our best judgment.

**CUTTINGS**—Pot rooted cuttings to small-sized pots to save greenhouse space or, after the danger of frost is passed, pot them outside to growing-sized pots. Rooted cuttings will require shade for a few weeks until they become established in the pots. Snow fence seems to be the most practicable for use out of doors.

**SOIL**—Our soil is a light, sandy loam, and is well drained. It is ideal for growing hydrangeas. Several months in advance of potting, we add well-rotted cow manure and peat moss to our soil. Peat moss is replacing cow manure with most florists. Add raw bone meal and horn shavings, plus Electra, or any good organic fertilizer, to your soil.

A good soil mix should consist of 2 parts loam,  $\frac{1}{2}$  part well-rotted cow manure,  $\frac{1}{2}$  part peat. If the soil is heavy, add 1 part sharp sand. To each wheelbarrow-load of this mix, add a 4-inch pot of raw bone meal, a 4-inch pot of horn shavings, and a 3-inch pot of Electra.

During the summer growing period weeds become a big problem. Control them by steam sterilization or methyl bromide. We use the methyl bromide gas with good results.

Some growers test their soil and feed nutrients accordingly to keep the nutrient level within the desired range for all of the elements. If this is practicable for you we would certainly recommend this method. Those of us who do not find this practical must learn to know our soil and how to fertilize it.

**SOIL TESTING**—Have the soil tested once in a while to avoid over-fertilization. Use soil tests as a trouble shooter. Test your water, too. In some localities water is the chief cause of hydrangea troubles. In our opinion as many hydrangeas are messed up by over-feeding as from starvation.

**SUMMER FEEDING**—Hydrangeas are heavy nitrogen feeders, and considerable nitrogen fertilization is necessary to produce strong stems with dark green leaves. Phosphate and potassium generally should be in medium level. We have found that liquid feeding is the best and cheapest method of application of fertilizer. Our soil tests almost always indicate the use of 25-10-10 or 21-7-7 fertilizer.

We recommend applying small doses of fertilizer as often as practical, using a 25-10-10 at the rate of  $1\frac{1}{2}$  pounds to 100 gallons of water every 10 days, or  $\frac{1}{2}$  ounce to 2 gallons of water, during the summer growing season. Smaller doses fed more often will help avoid burning. Use some phosphate and potassium in your mix so that you always use a complete mix whenever fertilizing. Start feeding as soon as roots become established in the soil and continue until mid-September.

**PINCHING**—Pinch varieties similar to Strafford and Merveille about June 20, and the ranker growing varieties similar to Hamburg about July 1. Pinch as low as possible, leaving two sets of leaves, if possible. This should give the plants enough lateral buds to break with 2 to 4 shoots.

**WATERING**—Summertime growing requires an adequate watering system, as hydrangeas require lots of water. The pots should be plunged to reduce drying. We use a Rotavator to prepare our soil for plunging. If your soil is well drained, plunge directly in the soil. If it is not well drained, use raised beds filled with ashes or sand in order to provide proper drainage. Hydrangeas, while they like and need lots of water, can not stand "wet feet," and must be well drained to aerate the soil. We irrigate about 6 acres of hydrangeas every day the sun shines and our experience has indicated the most satisfactory and economical means for area watering is to use portable aluminum pipe with Rainbird sprinklers. One reason for yellowing leaves may be caused by having the pots practically sitting in water.

**STORAGE**—Don't take a chance on frost. Protect, or be prepared to protect, your hydrangeas before the danger of frost. Flower buds begin to initiate when the temperature drops below 60 degrees F. They should be initiated about Oct. 1-15. Hydrangeas must be stored in the light until the buds have properly initiated. The buds then have to develop at temperatures of 40 to 45 degrees F. for from 4 to 6 weeks, during

which time dark storage is preferable. If the temperature is not held cold for a sufficiently long period of time, the plants will take longer to force.

**FORCING**—Our hydrangeas are grown and shipped in smaller-sized pots than the finished plants will be grown, in order to save shipping weight. They should be ready to start to force upon arrival. It may be best to put them back in the same sized pots until the roots start to grow before shifting into finishing pots. If you do shift them up immediately, then try a light crushing of the hard dirt ball, or soak them in water before potting. This will help get the roots off to a better start.

Hydrangeas, when completely dormant, can stand freezing, provided they are thawed slowly in the dark. If your shipment arrives frozen, do not unpack them, but store them in a dark, cool place until completely unfrozen. If this is done no damage should result from the freezing.

Some of the practices followed in forcing hydrangeas must vary from year to year. There is considerable variation between varieties in their rate of forcing. Strafford takes about 90 days at 60 degrees F. night temperature, under good conditions, while earlier varieties such as Hamburg will flower about 10 days sooner. Thus, it is to your advantage to have them remain in storage longer, in order to have them force much quicker.

Hydrangeas lacking in fertilizers, particularly nitrogen, will develop more slowly at forcing. Well-fed plants will force as much as 10 days earlier than starved plants.

**TRIMMING**—The rule usually followed in timing hydrangeas is to have the flower buds the size of a pea about 8 weeks before sale. Shorten or lengthen this time by raising or lowering the night temperature from the normal of 60 degrees F. Avoid lowering the night temperature below 55 degrees F., otherwise mildew may develop. Treat mildew with sulphur on the heating pipes, or use Mildex as a control.

**FINAL FEEDING**—Hydrangeas grow best in a moderately acid soil. The presence of available aluminum in the soil makes blue flowers, while its absence makes them pink. High nitrogen fertilization counteracts the presence of aluminum, as does a soil with a pH of 6 or higher. The use of heavy phosphorus fertilizer helps keep the flower color pink by also rendering aluminum unavailable. If there is a large amount of aluminum in the soil, off-colored flowers may result, regardless of high pH, high nitrogen, and high phosphorus. Be careful in using nitrogen and phosphorus, as excess nitrogen causes soft growth and burning, while too much phosphorus leads to a premature shattering of the flowers. High potash may help produce off-color, bluish-pink flowers. Make frequent tests of soil if you are using high nitrogen and phosphorus, and consult with your state college or extension service for advice in their use. Most soil contains very little aluminum, and if this is true with your soil, we recommend using a liquid 25-10-10 at the rate of 2 pounds to 100 gallons of water every ten days, or 3 pounds per 100 gallons of water every 15 days. The first application should be made as soon as the new growth starts.

**BLUING**—If you are having trouble bluing hydrangeas, try pre-bluing them during the summer. Then you should continue with 6 applications during the forcing season at the rate of 1 pound to 7 gallons of water.

For best blues, avoid the use of lime, keep the pH at about 5.5, and use 25-0-20 or 25-5-20 analysis fertilizers, applying it only as often as necessary to maintain good growth and a good green color on the leaves.

**CHLOROSIS**—Chlorosis may be caused by a lack of iron in the soil. It shows up as a yellowing of the leaves, with darker green veins. This can be easily corrected with the new chelated iron applied at the rate of 1 ounce to 25 gallons of water. Where this is not serious it will clear up as soon as good root actions start. The new chelates are good but over-doses will cause burning, so be careful. The symptoms of iron deficiency, or chlorosis, may show up in hydrangeas due to root injury. If the roots are injured due to causes such as over-watering, over-feeding, etc., the plant can not take up the available iron, thus resulting in chlorosis. These conditions must be corrected as soon as detected so that the hydrangeas can make good root action.

**FINAL FORCING**—Along about 2 weeks before sale, attempt to harden off your plants. Drop the temperature back to 60 degrees F., if you have been forcing hard, and open the vents a little more. Keep air on as much as possible all through the forcing period, but add a little toward the end of the forcing time. This will help them to stand up better in the retail shop, and in the customer's home.

**INSECTS**—In order to control pests and insects, avoid crowding the hydrangeas, keep them well fertilized, properly ventilated, and heated. If they are kept growing well, very little trouble will result from infestations of pests. Lindane can be used to control aphids, and diathion or parathion aerosols are excellent for red spider and aphids. From among the many fungicides we have tested, we find that Zerlate seems to be the best. Fermate is also very satisfactory, however, it should not be used if the soil is to be steamed.

J. S. M., Jr.